REMARKS

Claims 1-31 are currently pending in the application. A purely formal amendment has been to Claim 2, line 4, by inserting the word "at" to correct a typographical error. Claims 1-2, 5-9, 11, 14, 16-21, 25-29, and 31 have been amended, as shown in the foregoing Listing of the Claims, to change references to "at least one" attribute or attribute value into references to "a plurality of" attributes or attribute values. A related amendment has been made to Claim 6, lines 3-4, changing "and" to "and/or," so that "at least one attribute value is one of price, quantity, . . . , and delivery cost" becomes "plurality of attribute values are values of price, quantity, . . . , and/or delivery cost." Support for these amendments may be found in the Specification at page 7, lines 5-11. Claims 1, 20, and 26 have been amended by adding the clause "said graphical visual interface permitting user interaction" to the end of each of those claims. Support for such amendment may be found in the Specification at page 7, line 16 – page 8, line 9. Claims 32-41 and 43-46 are new and add claims relating to the selection and deselection of filters in connection with the graphical user interface analogous to what was previously claimed in Claims 12-15. Support for these amendments is to be found in the Specification at page 7, line 16 – page 8, line 9. Claim 42 is new and adds an additional independent system claim which is generic to the species of Claims 1-31. The Examiner is authorized to charge $424 to Deposit Account No. 50-0510 (IBM-Yorktown). Support for Claim 32 may be found *inter alia* in Figures 3-8 and in the Specification at: page 10, line 4 – page 11, line 5; and page 12, line 16-23. No new matter has been added.

The Claimed Invention

The claimed invention provides a method, visual interface, and system for purchasing and selling products or services in a networked environment using a Request for Quotation (RFQ) process and a visual interface for evaluating submitted bids for such products or services. Also provided is a system for providing an interactive visualization

and interface for displaying one or more RFQs and one or more submitted bids with one or more attributes and evaluating the said submitted bids for their merit.

According to the claimed invention, a buyer 310 may submit one or more RFQs 316 and associated attributes and/or business rules over a network 318. A seller 326 may respond to the RFQ 316 by submitting a bid 332 with attribute values. A market maker 326 uses the buyer attributes and/or business rules with the attribute values of the submitted bid 332 to create a visual interface augmented by customized filters which are later used to evaluate seller submitted bids 332. The bids 332 are received in the e-marketplace 320, at which time the e-marketplace 320 can arrange, sort or filter the received bids 332 in order to assist the buyer 310 in examining and evaluating such bids 332. The filtering may include filtering an attribute value, an attribute line, a bid line or a portion of the bid line. The e-marketplace 320 may use the bids 332, in conjunction with the business rules and attribute values, to create a visual interface customized for individual RFQs 316 showing all the attributes of the RFQ 316 and related attribute values of individual sell bids 332 in a single screen.

Claims 1-31 have been rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter and under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,564,192 to Kinney et al. Applicants respectfully traverse, and request reconsideration, on the basis that Claims 1-31 are directed to patentable subject matter under 35 U.S.C. § 101 and are not anticipated by Kinney et al. under 35 U.S.C. § 102(e), as discussed below.

<u>Rejection of Claims 1-31 Under 35 U.S.C. § 101</u>

Claims 1-31 have been rejected as not directed to patentable subject matter. In this regard, the Patent Act provides:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

35 U.S.C. § 101. Applicants respectfully traverse the rejection, and request reconsideration, on the basis that Claims 1-31 are within the statutory requirements of patentability, as discussed herein.

The cases cited by the Examiner in support of rejection do not stand for the proposition that a claim may be held unpatentable solely on the basis of a "technology requirement." (Office Action at 2) All of those cases reversed rejections under 35 U.S.C. § 101, and one of the cases cited by the Examiner specifically held that there is no independent "technological arts" rejection. *In re Waldbaum*, 173 U.S.P.Q. 430 (C.C.P.A. 1972) (cited in the Office Action at 2), reversed the rejection of claims relating to a method of analyzing data words, holding that "[i]t is clear that appellant's process, which is useful to the internal operation of computer systems, is within the 'useful arts.'" 173 U.S.P.Q. at 434. Similarly, *In re Musgrave*, 167 U.S.P.Q. 280 (C.C.P.A. 1970) (cited in the Office Action at 2), reversed the rejection of certain method claims relating to seismograms, holding:

> We cannot agree with the board that these claims (all the steps of which can be carried out by the disclosed apparatus) are directed to non-statutory processes merely because some or all the steps therein can also be carried out in or with the aid of the human mind or because it may be necessary for one performing the processes to think.

167 U.S.P.Q. at 289. Furthermore, *In re Johnston*, 183 U.S.P.Q. 172 (C.C.P.A. 1974) (cited in the Office Action at 2), reversed the rejection of claims relating to a record keeping machine system, holding, "we are not aware of, nor can we locate, any dictionary that would define a *machine* system as within the purview of the 'liberal arts.'" 183 U.S.P.Q. at 177. Finally, *In re Toma*, 197 U.S.P.Q. 852 (C.C.P.A. 1978) (cited in the Office Action at 2), reversed the rejection of claims relating to a method of operating a digital computer to translate from a source natural language to a target natural language, such as from Russian to English. In holding the method claims to be patentable under

35 U.S.C. § 101, the Court expressly held that there is no"technological arts" rejection of the type the Examiner has invoked in this case:

> [T]he examiner has taken language from the cited cases and attempted to apply that language in a different context. Musgrave, In re Benson, and McIlroy all involved data processing methods useful in a computer, but not expressly limited to use in a computer. Furthermore, all of those cases involved a 'mental steps' rejection. The language which the examiner has quoted was written in answer to 'mental steps' rejections and was not intended to create a generalized defnintion of statutory subject matter. Moreover, it was not intended to form a basis for a new § 101 rejection as the examiner apparently suggests. To the extent that this "technological arts" rejection is before us, independent of the rejection based on Benson, it is also reversed.

197 U.S.P.Q. at 857. *In re Toma*, therefore, specifically rejected the existence of a "technological arts" rejection. Finally, Claims 1-31 are patentable as business method claims under the Federal Circuit's decision in *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 47 U.S.P.Q.2d 1596 (Fed. Cir. 1998), a case that is twenty years more recent than the most recent case cited by the Examiner in the Office Action. In *State Street Bank*, the Federal Circuit held, "Since the 1952 Patent Act, business methods have been, and should have been, subject to the same legal requirements for patentability as applied to any other process or method." 47 U.S.P.Q.2d at 1602.

With reference to Claims 1-31, it can be seen that they pertain to the technological arts in that independent Claims 1, 20, and 26 require implementation on a "network." (Claim 1, line 4; Claim 20, line 4; and Claim 26, line 4). Furthermore, the claims lead to the production of a tangible, concrete result in the form of a visual interface which permits evaluation and analysis of a number of bids which have different attribute values.

Applicants thus respectfully traverse, and request reconsideration of, the rejection of Claims 1-31 under 35 U.S.C. § 101 on the basis that Claims 1-31 claim patentable subject matter.

Rejection of Claims 1-31 Under 35 U.S.C. § 102(e)

Claims 1-31 have also been rejected under 35 U.S.C. § 102(e) as anticipated by Kinney et al. Applicants respectfully traverse, and request reconsideration, on the basis that Claims 1-31 include features that are not found in the disclosure of Kinney et al.

The disclosure of Kinney et al. teaches a well-known method and system for conducting electronic online auctions via the Internet, especially for business procurement. Where the auction method and system taught by Kinney et al. specifies only one attribute, that of price, the claimed invention may accommodate a plurality of attributes (Claims 1-2, 5-11, 14, 17-23, 25-29, and 31) including price, quantity, volume discount policy, material quality, product quality ratings, merchant reputation, warranty, support, tax, delivery time, and delivery cost. (Claim 6) As discussed elsewhere, Applicant has amended Claims 1-2, 5-11, 14, 17-23, 25-29, and 31 to replace the construction "at least one" with "a plurality" as clarification on this point. In doing so, Applicants have not in any way changed the substance of the claims, and the amendments are intended solely for the purpose of clarification.

In addition, Applicants traverse the Examiner's finding that Figure 6 of the disclosure of Kinney et al. represents a visual interface comparable to that of the claimed invention. Figure 6 of Kinney represents a graph, not an interface. A user can view, but cannot interact with, the graph represented in Figure 6 of Kinney et al., while Claims 1-31 of the claimed invention provide a visual interface with which a user may interact for bid evaluation by using filters and controls. In addition, Figure 6 of Kinney et al. shows only one attribute, "index bid amount," and its change over "bid time." By contrast, the claimed invention is capable of showing a plurality of attribute and their values, which Figure 6 of Kinney et al. does not contemplate. Finally, Figure 6 of Kinney et al. shows only one bid at a time, while the visual interface of the claimed invention can show a plurality of bids. Figure 6 of Kinney et al. is further discussed below in connection with specific comments made by the Examiner.

The Examiner incorrectly found that Kinney et al. discloses a method of purchasing products and services over a network comprising steps including "submitting a Request for Quotation (RFQ) with at least one attribute over the network." (Office Action at 3) While the Examiner has not cited a portion of the disclosure of Kinney et al. in support of rejection on this point, the Examiner's reference to an element 104 appears to refer to Figure 2 of the disclosure of Kinney et al., since Applicants' drawings do not include an element 104. Figure 2 of Kinney et al., which identifies element 104 as "RFQ," is as follows:

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FIG. 2

	COORDINATOR	BUYER	SUPPLIER
INITIAL CONTACT 102	CONTACT BUYER	PROVIDE DATA	
RFQ 104	COLLECT & ADMINISTER RFQ DATA	PROVIDE RFQ DATA	
	PUBLISH & ADMINISTER RFQ		ACCESS RFQ
	MANAGE RFQ RESPONSE		RESPOND TO RFQ
AUCTION ADMINISTRATION 106		REQUEST AUCTION	
	COORDINATE & ADMINISTER AUCTION SETUP		
	ASSIST & ADMINISTER USER AUCTION PREP		PREPARE FOR AUCTION
CONDUCT AUCTION 108	ASSIST & ADMINISTER AUCTION	OBSERVE	BID
ADMINISTER AUCTION RESULTS 110	ANALYZE & ADMINISTER AUCTION RESULTS	VIEW AUCTION RESULTS	VIEW AUCTION RESULTS
CONTRACT ADMINISTRATION 112		SETTLEMENT	SETTLEMENT

(Kinney et al., Figure 2) Thus, element 104 of Figure 2 of Kinney et al. does not refer to "submitting a Request for Quotation (RFQ) with at least one attribute over the network" as indicated by the Examiner. (Office Action at 3) Confirmation that Kinney et al. does not use element 104 for that purpose is provided by the specification of Kinney et al., in which the discussion of element 104 does not include mention of "at least one attribute" or of a "network":

> In the RFQ phase 104, the coordinator 20 works with the buyer 10 to prepare a Request for Quotation ("RFQ") 54. The coordinator 20 collects and maintains the RFQ data provided by buyer 10, and then publishes the RFQ 54, and manages the published RFQ 54. The RFQ 54 includes specifications 50 for all of the parts 52 covered by the RFQ 54. In the RFQ 54, buyer 10 aggregates similar part or commodity line items into job "lots." These lots allow suppliers 30 to bid on that portion of the business for which they are best suited.

(Kinney et al., column 3, lines 1-10)

The Examiner incorrectly found that Kinney et al. discloses a method of purchasing products and services over a network comprising steps including "receiving at least one bid in response to the RFQ over the network, each of the at least one bid having at lest one attribute value associated therewith." (Office Action at 3) The portion of Kinney et al. cited in support of the rejection, however, does not appear to include any mention of an "attribute value":

> In the RFQ phase 104, the coordinator 20 works with the buyer 10 to prepare a Request for Quotation ("RFQ") 54. The coordinator 20 collects and maintains the RFQ data provided by buyer 10, and then publishes the RFQ 54, and manages the published RFQ 54. The RFQ 54 includes specifications 50 for all of the parts 52 covered by the RFQ 54. In the RFQ 54, buyer 10 aggregates similar part or commodity line items into job "lots." These lots allow suppliers 30 to bid on that portion of the business for which they are best suited.

During the auction 56, bids 58 will be taken against individual lots (and their constituent parts 52) within RFQ 54. While suppliers 30 must submit actual unit prices for all line items, the competition in an Auction is based on the aggregate value bid for lots. The aggregate value bid for a lot depends upon the level and mix of line item bids and the quantity for each line item. Therefore, suppliers 30 submit bids at the line item level, but compete on the lot level.

In the Auction Administration phase 106, coordinator 20 coordinates the Auction and administers the Auction setup and preparation. The coordinator 20 sends a RFQ 54 to each participating supplier 30, and assists participating suppliers 30 with preparation for the Auction.

In the Auction phase 108, suppliers 30 submit bids 58 on the lots and monitor the progress of the bidding by the participating suppliers 30. The coordinator 20 assists, observes, and administers the Auction.

When the bidding period is over, the auction enters the Auction Results Administration phase 110. In this phase, coordinator 20 analyzes and administers the Auction results, which are viewed by buyer 10. The buyer 10 begins to conduct final qualification of the low bidding supplier(s). The buyer 10 retains the right not to award business to a low bidding supplier 30 based on final qualification results or other business concerns.

In the ensuing Contract Administration phase 112, the coordinator 20 facilitates settlements 60 awarded by the buyer 10 to suppliers 30. Contracts 52 are then drawn up between buyer 10 and suppliers 30.

Communications and Software

(Kinney et al., column 3, lines 1-40)

The Examiner also incorrectly found that Kinney et al. teaches a method of purchasing products and services over a network comprising steps including:

- "creating a graphical visual interface based on a Cartesian coordinate system, the graphical user interface showing a relationship in a graphical

format between the at least one attribute and the at lest one bid and
associated attribute value in a single display (fig. 6)" (Office Action at 3);

- "displaying information pertinent to a selected bid of the at least one bid
  (fig. 6)" (*Id.*);

- "wherein the graphical format are sell bid lines representative of selected
  connected attribute values of the at least one bid (fig. 6)" (*Id.*); and

- "wherein the information is one of a general information and detailed
  information related to the at least one bid (fig. 6)" (*Id.*).

As discussed above, however, Figure 6 of Kinney et al., which is cited in support of the
rejection on this point, represents a graph, not an interface. A user can view the graph
represented in Figure 6 of Kinney et al. but cannot interact with it. Independent Claims 1,
20, and 26 have been amended to by the addition of the phrase "said graphical visual
interface permitting user interaction" to clarify any uncertainty on that point. In addition,
Figure 6 of Kinney et al. shows only one attribute, "index bid amount," and its change
over "bid time," making it incapable of performing the functions of the graphical visual
interface of the claimed invention:

BID HISTORY GRAPH

FIG. 6

(Kinney et al., Figure 6)

The Examiner incorrectly found that Kinney et al. discloses a method of purchasing products and services over a network comprising steps including "selecting a portion of a selected sell bid line created from connected attribute values of the at least one bid; and retrieving the general or detailed information from a database, the general or detailed information being pertinent to the selected sell bid line." (Office Action at 3) The lengthy portion of Kinney et al. cited in support of rejection on this point, however, does not mention "sell bid line," "attribute values," or "database":

In the RFQ phase 104, the coordinator 20 works with the buyer 10 to prepare a Request for Quotation ("RFQ") 54. The coordinator 20 collects and maintains the RFQ data provided by buyer 10, and then publishes the RFQ 54, and manages the published RFQ 54. The RFQ 54 includes specifications 50 for all of the parts 52 covered by the RFQ 54. In the RFQ 54, buyer 10 aggregates similar

part or commodity line items into job "lots." These lots allow suppliers 30 to bid on that portion of the business for which they are best suited.

During the auction 56, bids 58 will be taken against individual lots (and their constituent parts 52) within RFQ 54. While suppliers 30 must submit actual unit prices for all line items, the competition in an Auction is based on the aggregate value bid for lots. The aggregate value bid for a lot depends upon the level and mix of line item bids and the quantity for each line item. Therefore, suppliers 30 submit bids at the line item level, but compete on the lot level.

In the Auction Administration phase 106, coordinator 20 coordinates the Auction and administers the Auction setup and preparation. The coordinator 20 sends a RFQ 54 to each participating supplier 30, and assists participating suppliers 30 with preparation for the Auction.

In the Auction phase 108, suppliers 30 submit bids 58 on the lots and monitor the progress of the bidding by the participating suppliers 30. The coordinator 20 assists, observes, and administers the Auction.

When the bidding period is over, the auction enters the Auction Results Administration phase 110. In this phase, coordinator 20 analyzes and administers the Auction results, which are viewed by buyer 10. The buyer 10 begins to conduct final qualification of the low bidding supplier(s). The buyer 10 retains the right not to award business to a low bidding supplier 30 based on final qualification results or other business concerns.

In the ensuing Contract Administration phase 112, the coordinator 20 facilitates settlements 60 awarded by the buyer 10 to suppliers 30. Contracts 52 are then drawn up between buyer 10 and suppliers 30.

Communications and Software

The Auction is conducted electronically between potential suppliers 30 at their respective remote sites and the coordinator 20 at its site. As shown in FIGS. 3 and 4, information is conveyed between the coordinator 20 and the suppliers 30

via a communications medium such as a network service provider 40 accessed by
the participants through, for example, dial-up telephone connections using
modems, or direct network connections. A computer software application is used
to manage the Auction. The software application has two components: a client
component 31 and a server component 23. The client component 31 operates on a
computer at the site of each of the potential suppliers 30. The client component is
used by suppliers 30 to make bids during the Auction. The bids are sent via the
network service provider 40 to the site of the coordinator, where it is received by
the server component 23 of the software application. The client component 31
includes software used to make a connection through telephone lines or the
Internet to the server component 23. Bids 58 are submitted over this connection
and updates are sent to connected suppliers.

Bids 58 can only be submitted using the client component 31 of the
application — this ensures that buyers do not circumvent the bidding process, and
that only invited suppliers participate in the bidding. Typically, bidders can see
their bids and bids placed by other suppliers for each lot on the client component
31. When a bidder submits a bid, that bid is sent to the server component 23 and
evaluated to determine whether the bid is from an authorized bidder, and whether
the bid has exceeded a pre-determined maximum acceptable price. Bids placed by
a supplier are broadcast to all connected bidders thereby enabling every
participating bidder to see quickly the change in market conditions and begin
planning their competitive responses.

SUMMARY OF THE INVENTION

In traditional online auctions for industrial components and materials,
bidders submit price quotes in absolute values, typically dollars or dollars per unit.
This works well when the buyer requires a single fixed price for a spot buy or over
the term of the contract and the price of the component or material is relatively

stable. In situations where the prices are relatively volatile, however, the supplier's cost and profit can diverge widely from the negotiated fixed price.

The present invention increases the competitive dimensions upon which an auction is run by enabling suppliers to compete over the length of the contract, not just the initial fixed price. Competition over the length of the contract is enabled through a bidding process that is performed relative to a predefined cost or price index. The index, or combination of indices are specified prior to the auction and communicated to all bidders. During the auction, bids are stated in terms that are relative to the current and future values of this index. Bids can be a percentage or absolute differential relative to the index, depending on the needs of the particular market. In addition, bids can be positive, zero or negative depending on whether bidders wish to bid above (premium), at, or below (discount) the nominated index.

The bidding process can be run against any arbitrarily defined index that can be calculated at points in the future. The index is time-varying and can be based upon one or more industry published indexes. Alternatively, the index can be based upon a formula that is defined by an industry or by the originator of the auction.

The present invention can separately specify the form of a bidder's bid and the display of that bid. Bids can be accepted for only the amount representing the differential, or may be accepted as the differential added to a starting value of the index. Further, bids can be displayed as differentials or as "gross" including a starting value of the index.

It is therefore a feature of the present invention that the index bidding process allows a buyer to procure supplies more efficiently. For example, a buyer who traditionally makes sporadic purchases from a catalog may originate an auction where the potential suppliers bid a discount off the published prices for future procurements. In this way, the buyer is able to secure a discount rate that

will apply to all future purchases, without having to specify an exact order at the

time of the auction.

(Kinney et al., column 3, line 1 – column 4, line 54)

Finally, the Examiner incorrectly found that Kinney et al. discloses a method of

purchasing products and services over a network comprising steps including "wherein the

retrieved general information is provided in a window adjacent the selected sell bid

line (58)." (Office Action at 3) While the Examiner has not cited a portion of the

disclosure of Kinney et al. in support of rejection on this point, the Examiner's reference

to an element 58 appears to refer to Figure 1 of the disclosure of Kinney et al., since

Applicants' drawings do not include an element 58. Figure 1 of Kinney et al., which

identifies element 58 as "bid," is as follows:

FIG. 1
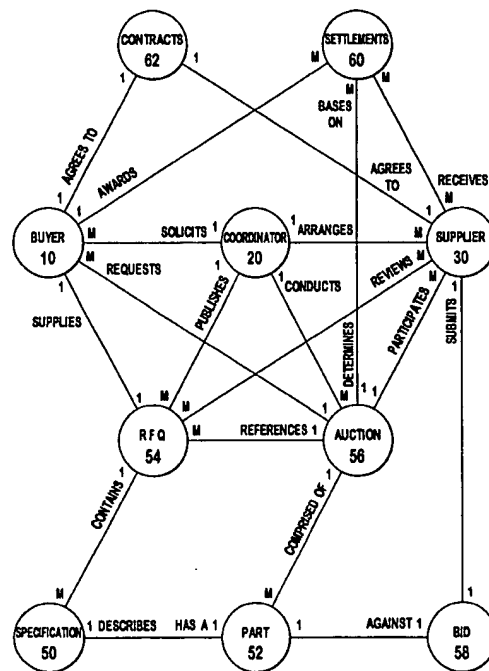
(Kinney et al., Figure 1)   Thus, element 58 of Figure 1 of Kinney et al. does not refer to "a window adjacent the selected sell bid line (58)" as indicated by the Examiner. (Office Action at 3) Confirmation that Kinney et al. does not use element 58 to refer to "a window adjacent the selected sell bid line" is provided by the specification of Kinney et al., which makes it clear that element 58 refers simply to a "bid", as indicated in the drawing:

> During the auction 56, bids 58 will be taken against individual lots (and their constituent parts 52) within RFQ 54 . . . .

* * *

In the Auction phase 108, suppliers 30 submit bids 58 on the lots and monitor the progress of the bidding by the participating suppliers 30 . . . .

* * *

. . . . Bids 58 are submitted over this connection and updates are sent to connected suppliers.

Bids 58 can only be submitted using the client component 31 of the application--this ensures that buyers do not circumvent the bidding process, and that only invited suppliers participate in the bidding . . . .

(Kinney et al., column 3, lines 11-13, 24-26, 59-64)

Applicants thus respectfully traverse, and request reconsideration of, the rejection of Claims 1-31 under 35 U.S.C. § 102(e) on the basis that Kinney et al. does not anticipate those claims for reasons discussed above.

Conclusion

In view of the foregoing, it is respectfully requested that the application be reconsidered, that Claims 1-32 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 50-0510 (IBM-Yorktown).

Respectfully submitted,

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